Marine Sponges in the British Museum. By Dr. J. E. Gray, F.R.S. &c.

Mr. Carter has examined with the microscope, figured, and described in a preliminary manner, the species of sponges in the British Museum, and has determined that there are more than six hundred species of that group in the collection, which he is now describing in detail. Every day brings forward important additions to this immense class, showing that at present we have a very imperfect knowledge of the sponges in existence; and as yet we have not received any sponges from the Persian Gulf, the beautiful islands of the Pacific, or from the shores of the northern parts of that ocean, and many other localities.

Habits of Terebratula truncata. By Dr. J. E. Gray, F.R.S. &c.

Mr. Atherstone has presented to the British Museum a series of specimens of *Terebratula truncata* from the S.E. coast of the Cape of Good Hope, showing that this species, unlike the *Terebratulae* from the Australian seas, which are generally found on stones and rocks, lives in groups, composed of specimens of all ages, on the stems of the larger Algæ, and also on the larger species of *Ascidia*. The shells vary greatly in the radiating grooves, some being very distinctly ribbed and others smooth, even in the same group.

On the Reproduction and Mode of Life of the Phyllopoda. By Dr. Friedrich Brauer.

The author observed these Crustacea in aquaria. He succeeded repeatedly in rearing both sexes of Apus cancriformis, Linn., from the ova, and in witnessing the act of fertilization. In this, the male places himself upon the carapace of the female, and then strikes repeatedly and quickly with the part of his body which is free from the carapace upon the ventral surface of the female, during which process the seminal matter is evacuated. The male of Apus cancriformis, Linn., and that of Apus numidicus, Grube, constantly possess one footless segment more than their females. Thus the male of Apus cancriformis presents seven, and the female six footless segments at the extremity of the body; whilst the male of Apus numidicus has nine, and the female eight. The author has also repeated the experiment made more than a hundred years ago by Schäffer, and, taking a female in the Nauplius-stage, brought it up in an isolated condition-by which means he obtained ova which were certainly unfecundated, and from which only females were developed, the eggs of which again furnished only female Phyllopoda as a third generation. In opposition to this he obtained chiefly males from the ova of fecundated females. In conclusion, the author refers to the breeding of these and other Phyllopoda in aquaria in accordance with the method invented by Prazak, and describes briefly the mode of life of Branchipus stagnalis, Linn., and Estheria dahalacensis, Rüpp. — Anzeiger der Akad. der Wiss. in Wien, May 31, 1872, p. 100.